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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,275	12/09/2003	Hwaliang Ng	STL11270	4962
60533	7590	11/21/2006	EXAMINER	
TOLER SCHAFFER, LLP 5000 PLAZA ON THE LAKES SUITE 265 AUSTIN, TX 78746			NGUYEN, TAI V	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/731,275

Applicant(s)

NG, HWALIANG

Examiner

Tai Van Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27-January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/9/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of invention Group I, Claims 1-10 in the reply filed on 10/27/2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 11-20 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention of Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/27/2006.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. The following title is suggested: A METHOD OF FORMING A DISC PACK.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 7 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Sacks et al (US 6,377,413).

As applied to claim 1, Sacks et al disclose a method of forming a disc pack, the method comprising: (a) forming at least one alignment feature (109, Fig. 1) between an inner diameter (124) and an outer diameter (126) of each of a plurality of discs; and (b) utilizing the at least one alignment feature of a first disc of the plurality of discs and the at least one alignment feature of a second disc of the plurality of discs to substantially vertically align servo patterns (128) on the first disc with servo patterns on the second disc.

As applied to claim 7, Sack et al disclose wherein the servo patterns on the first disc and the servo patterns on the second disc are formed subsequent to carrying out the forming the at least one alignment feature step (a) (column 10, lines 29-42).

As applied to claim 10, Sacks et al disclose wherein the utilizing step (b) further comprises utilizing the at least one alignment feature of the first disc of the plurality of discs and the at least one alignment feature of the second disc of the plurality of discs to vertically align a servo timing index on the first disc with a servo timing index on the second disc (see Fig. 1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sacks et al in view of Hoogerwerf et al (US 5,523,539).

As applied to claim 2, Sacks et al disclose all of the limitations of the claimed invention except forming at least one laser mark on each of the plurality of discs.

However, Hoogerwerf et al. teach forming at least one laser mark on each of the plurality of discs (column 12, lines 56-65+). It would have been obvious to one of ordinary skill in the art at this time the invention was made to have modified the method of Sacks et al by including laser mark on each disk, as taught by Hoogerwerf et al, to positively improve the manufacture of an accurate scan disk drive assembly (column 4, lines 43-45).

9. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sacks et al in view of Damer et al (US 6,365,061).

As applied to claims 3 and 5, Sacks et al disclose all of the limitations of the claimed invention except removing at least one segment from each of the plurality of discs.

However, Damer et al teach the removing at least one segment from each of the plurality of discs (column 3, lines 13-35). It would have been obvious to one of ordinary

skill in the art at this time the invention was made to have modified the method of Sacks et al by including a step of removing at least one segment from each of the plurality of discs, as taught by Damer et al, to provide at recognized equivalent servo tracks in each of the disc pack.

10. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sacks et al in view of Chuang et al (US 6,105,240).

As applied to claim 4, Sacks et al disclose all of the limitations of the claimed invention except that at least one imbalance reduction feature on each of the plurality of discs. However, Chuang et al teach at least one imbalance reduction feature on each of the plurality of discs (column 15, lines 21-29).

As applied to claim 6, Chuang et al disclose the at least one imbalance reduction feature of the first disc of the plurality of discs is formed diametrically opposite the at least one alignment feature of the first disc of the plurality of discs and the at least one imbalance reduction feature of the second disc of the plurality of discs is formed diametrically opposite the at least one alignment feature of the second disc of the plurality of discs (column 15, lines 1-50).

It would have been obvious to one ordinary skill in the art at this time the invention was made to have modified the method of Sacks et al by including imbalance reduction, as taught by Chuang et al, to positively performing a dynamic imbalance test on the disc stack (column 7, lines 4-5).

10. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sacks et al. in view of Stefansky et al (US 5,404,636).

As applied to claim 8, Sacks et al. disclose all of the limitations of the claimed invention except the utilizing the at least one alignment feature of each of the plurality of discs to bias each disc of the plurality of discs against a spindle motor shaft.

However, Stefansky et al teach the utilizing the at least one alignment feature of each of the plurality of discs to bias each disc of the plurality of discs against a spindle motor shaft (column 11, lines 13-29).

As applied to claim 9, wherein alternate discs of the plurality of discs on the spindle motor shaft are biased at 180-degree opposition (column 9, Spin Motor).

It would have been obvious to one of ordinary skill in the art at this time the invention was made to have modified the method of Sacks by including bias each disc of the plurality of discs against a spindle motor shaft, as taught by Stefansky, to positively improving the manufacturability of storage devices (column 6, lines 18-20).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

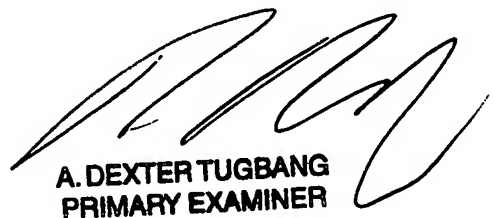
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai Van Nguyen whose telephone number is 571-272-4567. The examiner can normally be reached on M-F (7:30 A.M - 4:30 P.M).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN. November 13, 2006



A. DEXTER TUGBANG
PRIMARY EXAMINER